

# Work Order ID 56918

March 12, 2010 11:46:12 AM

Page 1

Item ID: D350-591-213

Accept

Setup Start

Revision ID:

Stop

Item Name: Heli-Access-Step, Short LH

Start Date: 3/15/10 Start Qty: 400

Required Date: 3/19/10 Req'd Qty: 400

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3078

A

DSI 9472

A

100

0.00



DC

Document Control

DOCUMENT CONTROL

Memo

0.00

Photocopy bluefile and type labels as per PPP D350-591-213 CHG003

*Siobal us*

*HJ da BG 10/04/01*

*I put labels on steps Siobal us*

110

0.00



Large Fab

Large Fab

Large Fab

Memo

0.00

1-Cut D2622-120 extrusion to 59.75" long as per Dwg D3078  
2-Drill extrusion as per Dwg D3078 using Jig DT8680 for rivets.  
3-Deburr

*5 f*

*10-03-17*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 56918



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March 12, 2010 11:46:13 AM

Item ID: D350-591-213

Accept



Setup Start



Revision ID:

Stop



Item Name: Heli-Access-Step, Short LH

Start Date: 3/15/10 Start Qty: 4.00



Cust Item ID:

Required Date: 3/19/10 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

120

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

130

Large Fab

0.00



Large Fab

Memo

0.00

Large Fab

1-Bevel end for welding FWD ONLY  
2-Weld Support using Jig DT8681, weld Fwd End Plate as per QSI 004 & Dwg D3072  
A/R Aluminum Rod M111311  
3-Grind End Plate flush

10.03.26

5

140

QC9- Inspect visual per QSI004- Fusion Welds

0.00



QC

Memo

0.00

Quality Control

10.03.26

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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**NOTE:** Date & initial all entries

**Work Order ID 56918**

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Item Name: Heli-Access-Step, Short LH

Start Date: 3/15/10 Start Qty: 4.00



Cust Item ID:

Required Date: 3/19/10 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

150

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

8/03/26



160

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

1/10/03/26



170

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

m. 1/03/30



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Stop

Item Name: Heli-Access-Step, Short LH

Start Date: 3/15/10 Start Qty: 4.00

Cust Item ID:

Required Date: 3/19/10 Req'd Qty: 4.00

Customer:

Reference:

Run Start

Approvals: Process Plan:

Date:

Tooling:

Date:

Stop

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

180



Large Fab

Large Fab

Large Fab

Memo

Rivet Leg Assembly as per Dwg D3078

0.00

0.00

0.00

0.00

0.00

0.00

190



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

200



Large Fab

Large Fab

Large Fab

Memo

1-Bevel Aft end for welding  
2-Inspect for foreign object as per QSI 024  
3-Weld Aft End Plate as per QSI 004 & Dwg D3078  
A/R Aluminum Rod m111311  
4-Grind End Plate flush

0.00

0.00

5

Ø

10.03.30

N/A

10.03.29

10.03.30

5

Ø

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Item ID: D350-591-213

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Revision ID:

Stop

Item Name: Heli-Access-Step, Short LH

Start Date: 3/15/10 Start Qty: 4.00

Cust Item ID:

Required Date: 3/19/10 Req'd Qty: 4.00

Customer:

Reference:

Run Start

Approvals: Process Plan:

Date:

Tooling:

Date:

Stop

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

210

QC9- Inspect visual per QSI004- Fusion Welds

0.00



QC

Memo

0.00

Quality Control

⑤ PD 10.03.30

220

QC5- Inspect part completeness to step on W/O

0.00



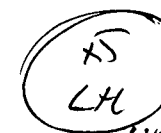
QC

Memo

0.00

Quality Control

8/10/03/30



(yes they are Left Hands)

230

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

PR 10-3-31 (5LH)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Cust Item ID:

Required Date: 3/19/10 Req'd Qty: 4.00

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

240

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

⇒ 44 10/03/31

(X544)

Ø

Powdercoat

Memo

0.00

Powder Coating

START TIME: 10:30 AM  
OVEN TEMPERATURE: 320°F  
FINISH TIME: 11:00 AM

250

Wing Walk as per dwg QSI005 4.4 Batch

0.00

BR 10-3-31

(544)

Ø

HandFinish

Memo

0.00

Hand Finishing

260

QC3- Inspect Part Finish

0.00

Scalados

(X544)

QC

Memo

0.00

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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# Work Order ID 56918

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Item ID: D350-591-213

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Stop

Item Name: Heli-Access-Step, Short LH

Start Date: 3/15/10 Start Qty: 4.00

Cust Item ID:

Required Date: 3/19/10 Req'd Qty: 4.00

Customer:

Reference:

Run Start

Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

270

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

*10/4/8 (5)*

280

QC4- 100% Inspect kits for completeness

0.00



QC

Memo

0.00

Quality Control

*8 idos*

*(x5 4H) 40 LH*

290

Packaging

0.00



Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D350-591-213

Location: FE

PPP Rev: FE

*10/4/9 (3)*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 56918



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March 12, 2010 11:46:28 AM

Item ID: D350-591-213

Accept



Setup Start



Revision ID:

Item Name: Heli-Access-Step, Short LH

Stop



Start Date: 3/15/10 Start Qty: 4.00



Cust Item ID:

Required Date: 3/19/10 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

300

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/04/12

ME  
10-4-9

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

March 12, 2010 11:45:49 AM

Page 1

Work Order ID: 56918

Parent Item: D350-591-213

Parent Item Name: Heli-Access-Step, Short LH


Start Date: 3/15/10

Required Date: 3/19/10

Comments: IPP Rev:B 05.10.14 Modified step 101 KJ/EC  
IPP Rev:C 06-06-19 Added D2732-030 AS PER DSI9294 JLM  
IPP Rev:C 06-06-27 Revised as per DSI9340 JLM

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Remaining Qty	Date	Status
D2622-120C		Manufactured	No			110	Each	131.2400	2.0000		
											
Step Extrusion											

Warehouse Loc Qty Loc Code

Location

Main Warehouse

WA

131.24

48612

3.12

52026

5.12

55214

123

D3067-1

Manufactured

No

130

Each

17.0000

(5) 4.0000



End Plate

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST 357011

17

53784

17

D3063-1

Manufactured

No

130

Each

22.0000

(5) 4.0000



Support

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

22

51237

22

2.5  
3/10.03.24

2.5  
3/10.03.24

5  
3/10.03.24

5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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# Picklist Print

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Page 2

Work Order ID: 56918

Parent Item: D350-591-213

Parent Item Name: Heli-Access-Step, Short LH


Comments: IPP Rev:B 05.10.14 Modified step 10 KJ/EC  
IPP Rev:C 06-06-19 Added D2732-030 AS PER DSI9294 JLM  
IPP Rev:C 06-06-27 Revised as per DSI9340 JLM

Start Date: 3/15/10

Required Date: 3/19/10

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Remaining Qty	Date	Status
MS20600-AD4W4		Purchased	No			180	Each	947.0000	64.0000		
											
Rivets											

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST321	947	
110731	215	
111359	46	
111477	74	
112314	88	
112385	24	
113368	500	

D3066-1

Manufactured No

180 Each

117.0000

8.0000



Spacer

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST	12	
51545	11	
53783	1	

Main Warehouse

WA	105	
56752	105	

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Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Page 3

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Parent Item: D350-591-213

Parent Item Name: Heli-Access-Step, Short LH

Start Date: 3/15/10

Required Date: 3/19/10

Comments: IPP Rev:B: 05.10.14i Modified step 10i KJ/EC  
IPP Rev:C 06-06-19 Added D2732-030 AS PER DSI9294 JLM  
IPP Rev:C 06-06-27 Revised as per DSI9340 JLM

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Remaining	Qty	Date	Status
D3065-041		Manufactured	No			180	Each	45.0000	4.0000 (5)			
Step Leg Assembly Hi												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

WA

45

53795

15

55450

30

D3067-1 Manufactured No

200

Each

17.0000

4.0000 (5)

5

End Plate

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 357011

17

53784

17

AN3-35A 2P Purchased No

270

Each

177.0000

8.0000

5

Bolt

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST353

177

106993

12

110467

1

112314

164

M112314

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Shop Packet Print

Page 3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Work Order ID: 56918

Parent Item: D350-591-213

Parent Item Name: Heli-Access-Step, Short LH

Comments: IPP Rev:B 05.10.14 Modified step 10 KJ/EC  
IPP Rev:C 06-06-19 Added D2732-030 AS PER DSI9294 JLM  
IPP Rev:C 06-06-27 Revised as per DSI9340 JLM

Start Date: 3/15/10

Required Date: 3/19/10

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Remaining	Qty	Date	Status
D2856-400	1P	Manufactured	No			270	f	240.7221	2.4000	3.40		
Abraison Strip												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST403

240.7220842

50593

138.592084

52563

102.13

cut qty of 1 at 4.00"X 7.20" as per dwg (D2856-400-720)

AN4-11A 6P Purchased No



Bolt

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST357

422

110382

422

AN960JD416 12P Purchased No



Washer

270 Each

0.0000

48.0000



NA51143 204635

M110382

M113706

P 14/4/8 (5)

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Shop Packet Print

Page 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Parent Item Name: Heli-Access-Step, Short LH




Comments: IPP Rev:B 05.10.14 Modified step 10 IKJ/EC  
 IPP Rev:C 06-06-19 Added D2732-030 AS PER DSI9294 JLM  
 IPP Rev:C 06-06-27 Revised as per DSI9340 JLM

Start Date: 3/15/10

Required Date: 3/19/10

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Remaining	Qty	Date	Status
D2230-1 <i>EL</i>		Manufactured	No			270	Each	103.0000	<del>8.0000</del> <i>10</i>			
												
Lug												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST476

103

51761

4

54755

99

Purchased

No

270

Each

2,289.000

~~8.0000~~ *54755*



*Rec'd 4/8 (5)*

MS21042L3 *2P*



Nut

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST300

2289

110844

35

111274

27

111668

58

112314

285

112385

164

113523

20

113537

700

113644

1000

*M113537*

March 12, 2010 11:45:50 AM

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Page 5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

March 12, 2010 11:45:51 AM

Page 6

Work Order ID: 56918

Parent Item: D350-591-213

Parent Item Name: Heli-Access-Step, Short LH


Comments: IPP Rev: B105.10.14.1 Modified step 101 KJ/EC  
IPP Rev: C 06-06-19 Added D2732-030 AS PER DSI9294 JLM  
IPP Rev: C 06-06-27 Revised as per DSI9340 JLM

Start Date: 3/15/10

Required Date: 3/19/10

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Remaining	Qty	Date	Status
AN4-13A 4x		Purchased	No			270	Each	160.0000	16.0000			
											3/11/10	
Bolt												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST357 160

113749 110

114108 50

D2732 4x Manufactured No

270 f

47.3510 4.2105



Rubber Extrusion

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST412 47.351

38509 20.62

43118 26.731

cut qty of 4 at 3.00 as per dwg(D2732-030)

→ measured 8/10/10

43/18 1x  
56516 4.20

March 12, 2010 11:45:51 AM

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Page 6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

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Page 7

Work Order ID: 56918

Parent Item: D350-591-213

Parent Item Name: Heli-Access-Step, Short LH

Comments: IPP Rev:B 05.10.14 Modified step 10 IJKJ/EC  
IPP Rev:C 06-06-19 Added D2732-030 AS PER DSI9294 JLM  
IPP Rev:C 06-06-27 Revised as per DSI9340 JLM

Start Date: 3/15/10

Required Date: 3/19/10

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Remaining	Qty	Date	Status
D2230-3		Manufactured	No			270	Each	136.0000	8.0000			



Lug

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST476 136

50306 5

51568 2

55310 129

AN960JD10

Washer

MS21042L4

Nut

Purchased

No

270

Each

0.0000

16.0000

Purchased

No

270

Each

2,356.000

24.0000

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST300 2356

102552 6

104248 6

110507 184

111827 184

113422 976

114108 1000

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Page 7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

March 12, 2010 11:45:52 AM

Page 8

Work Order ID: 56918

Parent Item: D350-591-213

Parent Item Name: Heli-Access-Step, Short LH


Comments: IPP Rev:B 05.10.14 Modified step 10 JLM/KJ/EC  
 IPP Rev:C 06-06-19 Added D2732-030 AS PER DS19294 JLM  
 IPP Rev:C 06-06-27 Revised as per DS19340 JLM

Start Date: 3/15/10

Required Date: 3/19/10

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Remaining	Qty	Date	Status
AN4-16A 48		Purchased	No			270	Each	156.0000	16.0000			
												
Bolt												

*Handwritten signature/initials*

Warehouse	Loc Qty	Loc Code
<u>Location</u>		
Main Warehouse		
ST358	156	
112969	54	
114129	100	
18949	2	

M/112969

March 12, 2010 11:45:52 AM

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Page 8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries





DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. <b>D3078</b>	REV. A SHEET 1 OF 2
DATE <b>02.09.11</b>		TITLE <b>STEP ASSEMBLY, HI SHORT</b> SCALE NTS	
A	02.09.11	NEW ISSUE	

02.01.20 *#*

*W.D. 5698*

Part No.	Description	QTY -041	QTY -042
D3078-041	Step Assembly, High Short (LH)	X	
D3078-042	Step Assembly, High Short (RH)		X
D2622-60	STEP EXTRUSION	1	1
D3063-1	SUPPORT	1	1
D3065-041	LEG ASSEMBLY	1	1
D3066-1	SPACER	2	2
D3067-1	END PLATE	2	2
MS20600AD4W4	RIVET	16	16

**GENERAL NOTES:**

- 1) -041 SHOWN, FOR -042 INSTALL D3063-1 SUPPORT OPPOSITE SIDE
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

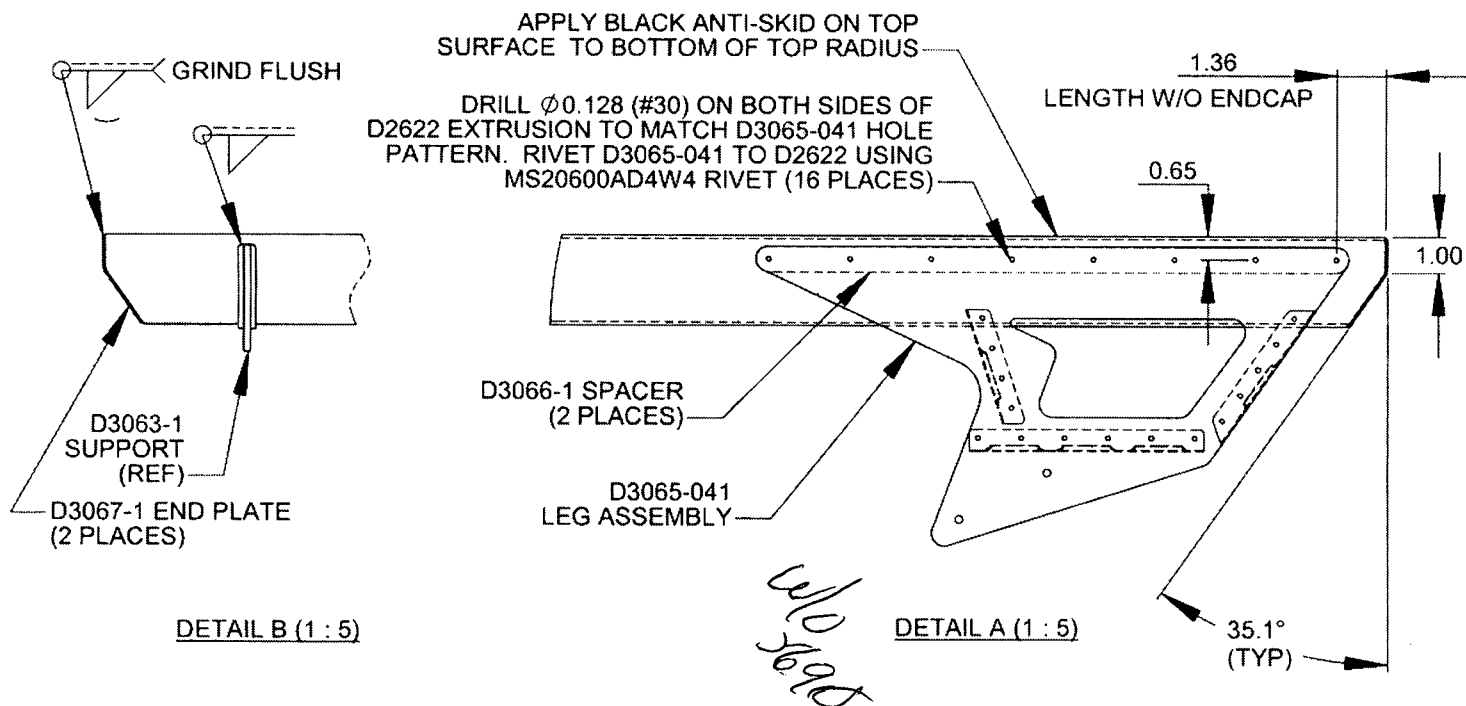
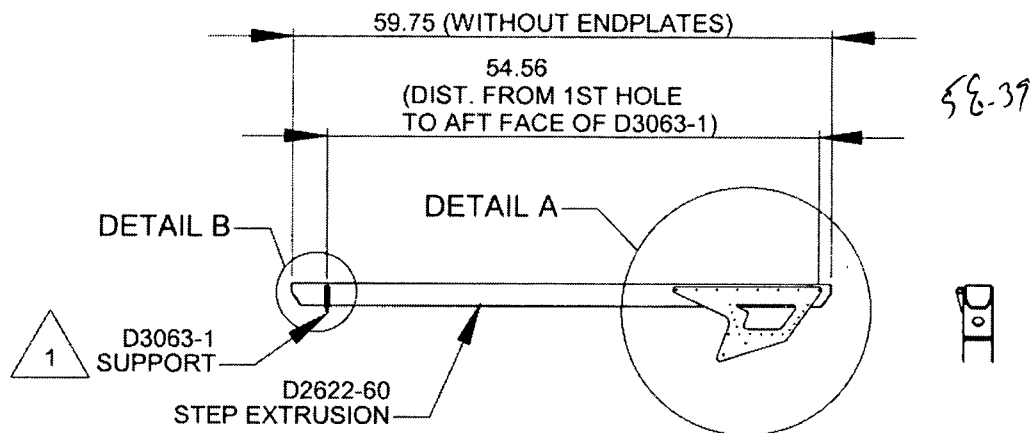
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**DART**



DESIGN	DRAWN BY	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. <b>D3078</b>
DATE 02.09.11	TITLE <b>STEP ASSEMBLY, HI SHORT</b>	REV. A SHEET 2 OF 2
	SCALE 1:20	



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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# REFERENCE ONLY

DART AEROSPACE LTD.

D350-591  
Page 23 of 23

Qty -211	Qty -212	Qty -213	Qty -214	Qty -215	Qty -216	Qty -311	Qty -312	Part Number	Description
X								D350-591-211	Heli-Access-Step™, Long Step – High Skid, LH
	X							D350-591-212	Heli-Access-Step™, Long Step – High Skid, RH
		X						D350-591-213	Heli-Access-Step™, Short Step – High Skid, LH
			X					D350-591-214	Heli-Access-Step™, Short Step – High Skid, RH
				X				D350-591-215	Heli-Access-Step™, Short Step – Low Skid, LH
					X			D350-591-216	Heli-Access-Step™, Short Step – Low Skid, RH
						X		D350-591-311	Heli-Access-Step™, Long Step – High Skid, LH
							X	D350-591-312	Heli-Access-Step™, Long Step – High Skid, RH
1								D3070-041	STEP ASSEMBLY (HIGH-LONG, LH)
	1							D3070-042	STEP ASSEMBLY (HIGH-LONG, RH)
		1						D3078-041	STEP ASSEMBLY (HIGH-SHORT, LH)
			1					D3078-042	STEP ASSEMBLY (HIGH-SHORT, RH)
				1				D3168-041	STEP ASSEMBLY (LOW-SHORT, LH)
					1			D3168-042	STEP ASSEMBLY (LOW-SHORT, RH)
						1		D3272-041	STEP ASSEMBLY (HIGH-LONG, LH)
							1	D3272-042	STEP ASSEMBLY (HIGH-LONG, RH)
4	4							D2182B035	RUBBER CUSHION
		2	2	2	2			D2230-1	MOUNTING LUG
		2	2	2	2	4	4	D2230-3	MOUNTING LUG
8	8							D2274	RADIUS BLOCK
						2	2	D2618	BUSHING
4	4	4	4	4	4			D2732-030	CUSHION
2	2	1	1	1	1	2	2	D2856-400-720	ABRASION STRIP
2	2							D3064-1	CLAMP
1	1							D3079-041	SUPPORT ASSEMBLY
4	4							D3080-1	CLAMP
						2	2	D3235-1	MOUNTING LUG
						1	1	D3278-041	SUPPORT ASSEMBLY
2	2	2	2	2	2	2	2	AN3-35A	BOLT
10	10	2	2	2	2			AN4-11A	BOLT
		4	4	4	4	8	8	AN4-13A	BOLT
						2	2	AN5-36A	BOLT
4	4	4	4	4	4	4	4	AN960JD10	WASHER
20	20	12	12	12	12	16	16	AN960JD416	WASHER
						4	4	AN960JD516	WASHER
2	2	2	2	2	2	2	2	MS21042L3	NUT
10	10	6	6	6	6	8	8	MS21042L4	NUT
						2	2	MS21042L5	NUT
						1	1	*DSI 9410-011	STEP MODIFICATION KIT

DSI 9410-011 Step Modification Kits are provided with all D350-591-311 and D350-591-312 Steps. This kit is provided as an option for the installer and is therefore **NOT REQUIRED** to complete the installation of the D350-311 or D350-591-312 Steps. Refer to Figure 21 for installation of the DSI 9410-011 Kit.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-591 REV. G OR EARLIER  
AND  
INSTRUCTIONS OF CONTINUED AIRWORTHINESS ICA-D350-591 REV. 2 OR EARLIER

REF CANADIAN STC: SH92-6

REF FAA STC: SH967NE


For D350-591-213/-214/-215/-216 steps, customers have the option of installing D2732-030 cushion under the clamps to accommodate varying crosstube diameters and to improve fit, as indicted in Installation Instructions D350-591. This Service Instruction adds longer AN4-16A bolts to the parts list to allow installation of these cushions. See Figure 1 on sheet 2 of this service instruction for reference. Installation of the D2856-400-720 Abrasion Strips per Installation Instructions D350-591 is not required when the cushions are installed.

For D350-591-213/-214/-215/-216 steps at CHG 003, the parts list of D350-591 Rev. G and ICA-D350-591 Rev. 2 is amended as follows:

ADD:

Qty -213	Qty -214	Qty -215	Qty -216	Part Number	Description
X				D350-591-213	<b>Heli-Access-Step</b> ™, Short Step – High Skid, LH
	X			D350-591-214	<b>Heli-Access-Step</b> ™, Short Step – High Skid, RH
		X		D350-591-215	<b>Heli-Access-Step</b> ™, Short Step – Low Skid, LH
			X	D350-591-216	<b>Heli-Access-Step</b> ™, Short Step – Low Skid, RH
4	4	4	4	AN4-16A	BOLT

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH DAO # 01-O-01	
APPROVED 	
BY:	D. SHEPHERD (DE # 02)
DATE:	09.08.05
CERT. NO.:	SH92-6
ISSUE NO.:	11

A	NEW ISSUE	RF	09.08.05
REV.	DESCRIPTION	BY	DATE
DESIGN	9P	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF	DRAWING NO.	REV. A
CHECKED	UP	DSI 9472	SHEET 1 OF 2
MFG. APPR.	NCA	TITLE	SCALE
APPROVED		BOLT ADDITION	NTS
DE APPR.		COPYRIGHT © 2009 BY DART AEROSPACE LTD	
DATE	09.08.05	THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries